Nov 08 1978

Mr. John B. Geddie, Esquire
900 South Tower, Pennzoil Place
Houston, Texas 77002

Dear Mr. Geddie:

Your letter of July 25, 1978, requests an interpretation of 49 CFR Section 192.13 as it relates to flexible pipe fabricated of multiple layers of extruded nylon plastic tubing and spirally wound steel strap for use in oil and natural gas production, gathering and transmission piping in offshore areas. This request is based largely upon data previously furnished by Mr. Bernard Dubois, Vice President, Coflexip and Services, Inc., manufacturer of the pipe in question.

The flexible pipe varies in size from one inch through 16 inch internal diameter (I.D.) with working pressures of 125 pounds per square inch (psi) to 15,000 psi or more. Steel components provide the pressure seal. The structure of the flexible pipe includes three main components, the characteristics and dimensions of which are designed to meet the service conditions. These components are:

1. An interlocked spiralled steel carcas which provides resistance to crushing and preserves pipe roundness, even when the pipe is wound on a short radius or subjected to various inside and outside pressure and tensile stresses.

2. Steel wire crossed armored layers provide resistance to pulling and longitudinal stresses induced by internal pressure.

3. The inner plastic tube and outside plastic sheath provide a leakproof seal and corrosion resistance.

Such a pipe design cannot be considered as either "steel pipe" or "plastic pipe," as those terms are intended in 49 CFR Part 192, but must be considered as a special pipe of composite materials similar to the design of many types of pipeline components. As a result, the requirements in Part 192 specifically applicable to steel or plastic pipe do not apply to the Coflexip pipe. This does not mean, however, that Section 192.13 prohibits the use of this type of pipe in gas service. This Section is intended merely to set the effective dates for compliance with the applicable provisions of Part 192. If a Part 192 provision does not apply by its terms a particular type of pipe, such as Coflexip pipe, then an operator need only meet those provisions of Part 192 that apply. For example, the requirements of Sections 192.103 and 192.143 would apply to the design using Coflexip pipe.

Your letter contends that corrosion protection is provided by the interior and exterior Nylon II-polyamide layers. Notwithstanding this claim, we believe that the Coflexip pipe can

reasonably be called a "metallic pipeline" and thus, the requirements of Subpart I would apply to it. If, however, corrosion control in the service environments can be demonstrated, an operator would be free to apply for a waiver from compliance with one or more of the Subpart I requirements. Also, you may wish to file a petition for rule making in accordance with 49 CFR Part 106 to amend the requirements of Subpart I with regard to metallic pipe such as the Coflexip pipe.

Sincerely,

Cesar DeLeon
Associate Director for
Pipeline Safety Regulations
Materials Transportation Bureau

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